

## **DRAFT Curriculum Vitae**

### **Michelle Parvatiyar**

Last Revised: February 20, 2026

#### **General Information**

University address: Health, Nutrition, and Food Sciences  
College of Education, Health, and Human Sciences  
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#### **Professional Preparation**

2009 Ph.D., University of Miami. Major: Molecular and Cellular Pharmacology.  
Hereditary cardiomyopathies. Supervisor: James D. Potter, Ph.D.

Parvatiyar, M.S. (2009). *Predicting cardiomyopathic phenotypes by altering the calcium affinity of troponin C*. (Doctoral dissertation, University of Miami). Retrieved from [scholarlyrepository.miami.edu/oa\\_dissertations/292/oa\\_dissertations-1291;991031447222502976](https://scholarlyrepository.miami.edu/oa_dissertations/292/oa_dissertations-1291;991031447222502976).

2000 B.A., Thomas More College. Major: Biology. Supervisor: William Bryant, Ph.D. Magna cum laude.

#### **Nondegree Education and Training**

2025 CAT Summer Course Design Institute Workshop, Competitive Entry, June 24-27, 2025.

2018 Research Project Scientist, College of Medicine, Department of Dermatology, University of California Los Angeles.

2013–2018 Research Project Scientist, Dept of Integrative Biology and Physiology, University of California Los Angeles.

- 2011–2013 Postdoctoral Fellow, Dept of Anesthesiology, David Geffen School of Medicine, University of California Los Angeles.
- 2009–2011 Postdoctoral Fellow, Dept of Molecular and Cellular Pharmacology, Miller School of Medicine, University of Miami.
- 2002–2004 Ph.D. student in the Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati, College of Medicine.
- 1999–2002 Research Assistant, Dept. of Molecular and Cellular Physiology University of Cincinnati.

### **Professional Experience**

- 2018–present Assistant Professor, Health, Nutrition, and Food Sciences, Florida State University.

### **Honors, Awards, and Prizes**

- FSU Provost's Faculty Travel Grant, Florida State University (2025). (\$1,500).
- Robert M. Gagné Research Award - Faculty Finalist, Florida State University (2025). (\$2,000).
- McKnight Junior Faculty Development Fellowship Award, Florida Education Fund (2022). (\$20,000).
- FSU Provost's Faculty Travel Grant, Florida State University (2019). (\$1,000).
- AHA-FIT Fellows in Training Program (Western States Affiliate), American Heart Association (2017).
- CDMD Muscle Cell Biology and Disease Annual Scientific Retreat Session - 1st Place Postdoctoral Poster Competition, University of California-Los Angeles (2016).
- CureDuchenne Postdoctoral Fellowship Award, CureDuchenne - Center for Muscular Dystrophy Disease (2014). (\$25,000).
- Predocotrual Travel Award, University of Miami (2009). (\$1,000).
- Undergraduate Research Fellowship, Cincinnati Children's Hospital Medical Center (1998). (\$8,000).

### **Fellowship(s)**

- International Fellow of the American Heart Association (2025).
- Florida Education Fund - McKnight Junior Faculty Award (2022–2023).

### **Current Membership in Professional Organizations**

American Association for the Advancement of Science  
International Society of Heart Research 2019-current  
Society for South Asian Heart Research 2023 - Present  
The American Heart Association 2015-Present  
The American Physiological Society 2012-Present  
The Biophysical Society 2009-Present  
The Cardiac Muscle Society 2012-Present

## **Teaching**

### **Courses Taught**

Directed Individual Study (HUN4905)  
Directed Individual Study (BSC4900)  
Functional Anatomy and Physiology II (PET3323C)  
Human Physiology I (APK6178)  
Sarcospan & Metabolism (HUN6906)  
Protein Expression in Ischemia (HUN5906)  
Advanced Topics (PET6931)  
Honors Work in Biological Science (BSC4970)  
Cytokine Analysis for Lab (BSC4900)  
Supervised Research (HUN6911)  
Honors Work in Biomedical Sciences (BMS4903)  
Cardiomyopathy Research (BMS4901)  
Honors Work in Behavioral Science (BMS4901)  
Honors Work in Biological Science (BSC4970)

### **New Course Development**

Graduate Grant Writing (2023)  
Human Physiology I (2023)

### **Management of Multiple Course Sections**

Anatomy and Physiology II (PET3323C)

### **Doctoral Committee Chair**

Mohammadipour, N., doctoral candidate.

### **Doctoral Committee Member**

Centner, A., graduate. (2022).  
Chastain, R. C., doctoral student.

### **Master's Committee Chair**

O'Connor, K. E., graduate. (2021).

### **Master's Committee Cochair**

Samarah, L., graduate. (2023).

### **Bachelor's Committee Chair**

Crawford, R., graduate. (2022). *Elucidating the systemic consequences of sarcospan ablation in inflammation.*  
ElSheikh, S., graduate. (2020). *The impact of sarcospan deletion on the ER stress response in obese mice.*  
Wacker, A., graduate. (2020). *Understanding Sarcospan Protein Function by Exposure of Mice to Beta-Adrenergic Stress.*

### **Bachelor's Committee Member**

Buro, S., graduate. (2023). *The Study of Interactions Between Cells and Surface Coatings for Applications in Gene Delivery.*  
Louah, Z., graduate. (2023). *2-D Gel Electrophoresis Analysis of Troponin I Isoform Switching in Wild Type and Hypertrophic Cardiomyopathy Mice Bearing the TnC-A8V Variant.*  
Hall, S. E., graduate. (2022). *The Study of Interactions between Gene Delivery Nanoparticles and Surface Coatings.*  
Patel, D., graduate. (2022). *Characterization of lung cancer mechanosensation.*  
Meinert-Spyker, E., graduate. (2021). *Studying the interactions between surfaces and polymer- and lipid-based nanoparticles for localized delivery of therapeutic nucleic acids.*

### **Supervision of Student Research Not Related to Thesis or Dissertation**

Oko, C. (Oct 2023–present).

Grunstein, E. (Jan 2023–present).

Jabari, E. (Jan 2023–present).

Patel, S. (Aug 2021–Aug 2024).

Dalili, C. (Jan–Jun 2024).

Olmo-Rodriguez, V. (Aug 2022–May 2023).

Uh, R. (Aug 2022–May 2023).

Mumbi, F. (Sep 2021–May 2023).

Florence, J. (May 2021–May 2023).

Suarez, J. (Dec 2021–May 2022).

Kwiat, V. (Aug 2021–May 2022).

Cox, A. (May–Sep 2021).

Missey, E. (May–Sep 2021).

Crawford, R. (Aug 2019–Aug 2020).

King, K. (Dec 2018–May 2020).

Wacker, A. (Nov 2018–May 2020).

Craddock, A. (Feb–Oct 2019).

Collado, J. (2015–18).

Gopal, J. (2014–17).

Ferrel, A. (2014–16).

Sowmendran, T. (2013–16).

Nguyen, R. (2013–15).

Richardson, V. (2013–15).

Lopez, T. (2012–14).

Kolmakova, M. (2011–12).

Lim, S. (2011–12).

Chavez, J. (2008–09).

Arita, A. (2004–06).

### **Additional Teaching Not Reported Elsewhere**

Parvatiyar, M. (2024). *First Year Connections and Success*.

[Parvatiyar, MS. (2024). *Guest Lecture - Research Design & Methods*. Florida State University.

### **Guest Lecture - Research Design & Methodologies - Invited by Dr. Bahram Arjmandi**

Parvatiyar, M. S. (2022). *Parvatiyar Laboratory Research Interests*. Florida State University.

Parvatiyar, M. S. (2021). *Parvatiyar Laboratory Research Interests*. Florida State University.

Parvatiyar, M. S. (2020). *Research in the Parvatiyar Lab*. Florida State University.

### **Guest Lecture - Research Design & Methodologies - Invited by Dr. Luyao Ma**

Parvatiyar, M. S. (2023). *Parvatiyar Laboratory Research Interests*. Florida State University.

### **Guest Lecture - Research Design & Methodologies, Invited by Dr. Bahram Arjmandi**

Parvatiyar, M. S. (2019). *Parvatiyar Lab Research Presentation*. Florida State University.

### **Guest Lecture - Responsible Conduct in Research, Invited by Dr. Bryant Chase**

Parvatiyar, M. S. (2020). *Underrepresentation of Women in the Sciences*. Florida State University.

### **Panel Discussion (HOE6366), Invited by Dr. Michael Delp**

Parvatiyar, M. S., Steiner, J., Gazelle, H., & Wu, J. (2019). *Women - Careers in Science*. Florida State University.

## Research and Original Creative Work

### Publications

#### Refereed Journal Articles

Patel, S., Leite da Sliva Santos, G, Florence, J., Rahimi Kahmini, A., Shi, Y., Rodriguez Garcia, M., Gordon, B., Chase, P., Solis, C., Laitano, O., Pinto, J., & Parvatiyar, M. (submitted). Hypertrophic Cardiomyopathy-Linked Tnnc1 A8V Mutant Causes Myopathic Changes in Slow Skeletal Muscle of Mice. *Journal of Muscle Research and Cell Motility*. Manuscript submitted for publication.

Patel, N., Leite da Silva Santos, G, Florence, J., Shi, Y., Solis, C., Gordon, B., Chase, P., Laitano, O., Pinto, J., & Parvatiyar, M. A. S. (submitted). Assessment of TNNC1 Gene Cardiomyopathy Variants on Smooth Skeletal Muscle Function. *Journal of Biochemical Biophysical Research Communications*. Manuscript submitted for publication.

Valera, I. C., Rahimi Kahmini, A., Smith, K., Crawford, R., & Parvatiyar, M. S. (submitted). Assessing a Role for Sarcospan in Immune Function. *PLoS One*. Manuscript submitted for publication.

Nass, T., Reichardt, A., Roghiyh Aliyari, S., Tom, E., LeMunyan, G., Parvatiyar, M., Cheng, G., & Parvatiyar, K. (in press). Cytosolic nucleic acid sensing triggers type I interferon activation via the Hippo kinase LATS1. *Journal of Biological Chemistry*.

Centner AM, Cullen, A., Khalili, L., Ukhanov, V., Hill, S., Deitado, R., Hwang, H., Azeez, T., La Favor, J., Laitano, O., Parvatiyar, M. S., & Salazar, G. (2025). The Role of Sex in the Effects of Smoking and Nicotine in Cardiovascular Function, Atherosclerosis, and Inflammation. *Nicotine & Tobacco Research*, 22;27(6), 1116-1126. doi:doi: 10.1093/ntr/ntae274

Shi, Y., Blackwell, L., Schroy, R., Cleland, B., Risi, C., Parvatiyar, M., Pinto, J., Galkin, V., & Chase, P. (2025). A Central Role for Troponin C Amino-terminal  $\alpha$ -Helix in Vertebrate Thin Filament Ca<sup>2+</sup>-activation. *Physchem*, 5(2), 16. Retrieved from <https://doi.org/10.3390/physchem5020016>

Tigro, H., Moutsoglou, M., Giho, K., Parvatiyar, M., Robinson, J., & Solis, C. (2025). Desensitization of the Cardiac Troponin Complex by TnI Phosphorylation and Epigallocatechin-3-gallate. *ACS Omega*.

Rahimi Kahmini, A., Valera, I. C., Samarah, L., Crawford, R. Q., ElSheikh, S., Takeuchi-

- Kanashiro, R., Olateju, B., Mohammadipour, N., Matthews, A. R., & Parvatiyar, M. S. (2024). Aging Reveals a Sex-Dependent Susceptibility of Sarcospan-Deficient Mice to Cardiometabolic Disease. *American Journal of Physiology - Heart and Circulatory Physiology*.
- Morales PN, Coons AN, Knoopman AJ, Patel, S., Bryant, P., Parvatiyar, M. S., & Pinto, J. (2024). Post-translational modifications of vertebrate striated muscle myosin. *Cytoskeleton*. Retrieved from <https://doi.org/10.1002/cm.21857> doi:10.1002/cm.21857
- Brooks, H. L., de Castro Bras, Lisandra E., Brunt, K., Sylvester, M. A., Parvatiyar, M. S., Sirish, P., Bansal, S. S., Sule, R., Eadie, A., Knepper, M., Fenton, R. A., Lindsey, M. L., Deleon-Pennell, K., & Gomes, A. V. (2024). Guidelines on Antibody Use in Physiology Research. *American Journal of Physiology - Renal*. Retrieved from <https://doi.org/10.1152/ajprenal.00347.2023> doi:10.1152/ajprenal.00347.2023
- Hwang, H. S., Rahimi Kahmini, A., Prascak, J., Carbonell, A. C., Valera, I. C., Champion, S., Corrigan, M., Mumbi, F., & Parvatiyar, M. S. (2023). Sarcospan Deficiency Increases Oxidative Stress and Arrhythmias in Hearts after Acute Ischemia-Reperfusion Injury. *International Journal of Molecular Sciences*, 15. Retrieved from <https://doi.org/10.3390/ijms241411868>
- Kwiat, V. R., Reis, G., Valera, I. C., Parvatiyar, K., & Parvatiyar, M. S. (2022). Autoimmunity as a sequela to obesity and systemic inflammation. *Frontiers in Physiology*, 13, 887702. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/36479348/> doi:10.3389/fphys.2022.887702
- Parvatiyar, M. S., & Qaisar, R. (2022). Editorial: Skeletal muscle in age-related diseases: From molecular pathogenesis to potential interventions. *Frontiers in Physiology*, 13. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/36324312/> doi:10.3389/fphys.2022.1056479
- Parvatiyar, M. S., & Pinto, J. R. (2022). On 'The content of troponin, tropomyosin, actin, and myosin in rabbit skeletal muscle myofibrils' by James D. Potter. *Archives in Biochemistry and Biophysics*, 726, 109301. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/35661778/> doi:10.1016/j.abb.2022.109301
- Landim-Vieira, M., Childers, M. C., Wacker, A. L., Rodriguez Garcia, M., He, H., Singh, R., Brundage, E. A., Johnston, J. R., Whitson, B. A., Chase, P. B., Janssen, P. M., Regnier, M., Biesiadecki, B. J., Pinto, J. R., & Parvatiyar, M. S. (2022). Post-translational modification patterns on  $\beta$ -myosin heavy chain are altered in ischemic and nonischemic human hearts. *eLife*, 11, e74919. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/35502901/> doi:10.7554/eLife.74919.
- Marques, M. A., Landim-Vieira, M., Moraes, A. H., Sun, B., Johnston, J. R., Dieseldorff Jones, K. M., Cino, E. A., Parvatiyar, M. S., Valera, I. C., Silva, J. L., Galkin, V. E., Chase, P. B., Kekenus-Huskey, P. M., de Oliveira, G. A. P., & Pinto, J. R. (2021). Anomalous structural

dynamics of minimally frustrated residues in cardiac troponin C triggers hypertrophic cardiomyopathy. *Chemical Science*, 12(21), 7308-7323. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/34163821/#affiliation-3> doi:10.1039/d1sc01886h

Bugert, C., Kwiat, V., Valera, I., Burgert, J., & Parvatiyar, M. S. (2021). Cardiovascular Injury Due to SARS-CoV-2. *Current Clinical Microbiology Reports*. Retrieved from <https://doi.org/10.1007/s40588-021-00160-0> doi:10.1007/s40588-021-00160-0

Valera, I. C., Wacker, A. L., Hwang, H. S., Holmes, C., Laitano, O., Landstrom, A., & Parvatiyar, M. S. (2020). Essential roles of the dystrophin-glycoprotein complex in different cardiac pathologies. *Advances in Medical Sciences*, 66(1), 52-71. doi:10.1016/j.advms.2020.12.004

Reinoso, T. R., Landim-Vieira, M., Shi, Y., Johnston, J. R., Chase, P. B., Parvatiyar, M. S., Landstrom, A. P., Pinto, J. R., & Tadros, H. J. (2020). A comprehensive guide to genetic variants and post-translational modifications of cardiac troponin C. *Journal of Muscle Research and Cell Motility*. Retrieved from <https://doi.org/10.1007/s10974-020-09592-5> doi:10.1007/s10974-020-09592-5

Tadros, H. J., Life, C. S., Garcia, G., Pirozzi, E., Jones, E., Datta, S., Parvatiyar, M. S., Chase, P. B., Allen, H., Kim, J., Pinto, J. R., & Landstrom, A. P. (2020). Meta-analysis of cardiomyopathy-associated variants in troponin genes identifies loci and intragenic hotspots that are associated with worse clinical outcomes. *Journal of Molecular and Cellular Cardiology*, 142, 118-125. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/32278834> doi:10.1016/j.yjmcc.2020.04.005

Dieseldorff Jones, K., Vied, C., Valera, I. C., Chase, P. B., Parvatiyar, M. S., & Pinto, J. R. (2020). Sexual dimorphism in cardiac transcriptome associated with a troponin C murine model of hypertrophic cardiomyopathy. *Physiological reports*, 8(6). Retrieved from <https://europepmc.org/articles/PMC7081104> doi:10.14814/phy2.14396

Parvatiyar, M. S., Brownstein, A. J., Kanashiro-Takeuchi, R., Collado, J. R., Dieseldorff Jones, K. M., Gopal, J., Hammond, K. G., Marshall, J. L., Ferrel, A., Beedle, A. M., Chamberlain, J. S., Pinto, J. R., & Crosbie, R. H. (2019). Stabilization of the cardiac sarcolemma by sarcospan rescues DMD-associated cardiomyopathy. *JCI Insight*, 5(11). doi:10.1172/jci.insight.123855

Marques, M. A., Parvatiyar, M. S., Yang, W., de Oliveira, G. A. P., & Pinto, J. R. (2019). The missing links within troponin. *Archives of Biochemistry and Biophysics*, 663, 95-100. doi:10.1016/j.abb.2018.12.026

Veltri, T., Landim-Vieira, M., Parvatiyar, M. S., Gonzalez-Martinez, D., Dieseldorff Jones, K. M., Michell, C. A., Dweck, D., Landstrom, A. P., Chase, P. B., & Pinto, J. R. (2017). Hypertrophic cardiomyopathy cardiac troponin C mutations differentially affect slow skeletal and cardiac muscle regulation. *Frontiers in Physiology*, 8(APR). doi:10.3389/

fphys.2017.00221

- Martins, A. S., Parvatiyar, M. S., Feng, H.-Z., Bos, J. M., Gonzalez-Martinez, D., Vukmirovic, M., Turna, R., Sanchez-Gonzalez, M. A., Badger, Crystal-D., Zorio, D. A. R., Singh, R. K., Wang, Y., Jin, Jin-P., Ackerman, M. J., & Pinto, J. R. (2015). In Vivo Analysis of Troponin C Knock-In (A8V) Mice: Evidence that TNNC1 Is a Hypertrophic Cardiomyopathy Susceptibility Gene. *Circulation: Cardiovascular Genetics*, 8(5), 653-664. doi:10.1161/CIRCGENETICS.114.000957
- Parvatiyar, M. S., & Pinto, J. R. (2015). Pathogenesis associated with a restrictive cardiomyopathy mutant in cardiac troponin T is due to reduced protein stability and greatly increased myofilament Ca<sup>2+</sup> sensitivity. *Biochimica et Biophysica Acta - General Subjects*, 1850(2), 365-372. doi:10.1016/j.bbagen.2014.09.029
- Parvatiyar, M. S., Marshall, J. L., Nguyen, R. T., Jordan, M. C., Richardson, V. A., Roos, K. P., & Crosbie-Watson, R. H. (2015). Sarcospan regulates cardiac isoproterenol response and prevents duchenne muscular dystrophy-associated cardiomyopathy. *Journal of the American Heart Association*, 4(12). doi:10.1161/JAHA.115.002481
- Parvatiyar, M. S., Landstrom, A. P., Figueiredo-Freitas, C., Potter, J. D., Ackerman, M. J., & Pinto, J. R. (2012). A mutation in TNNC1-encoded cardiac troponin C, TNNC1-A31S, predisposes to hypertrophic cardiomyopathy and ventricular fibrillation. *Journal of Biological Chemistry*, 287(38), 31845-31855. doi:10.1074/jbc.M112.377713
- Monte, E., Chen, H., Kolmakova, M., Parvatiyar, M. S., Vondriska, T. M., & Franklin, S. (2012). Quantitative analysis of chromatin proteomes in disease. *Journal of visualized experiments : JoVE*, 70:4294. Retrieved from <https://doi.org/10.1096/fasebj.2022.36.S1.R6079> doi:10.3791/4294
- Chen, H., Monte, E., Parvatiyar, M. S., Rosa-Garrido, M., Franklin, S., & Vondriska, T. M. (2012). Structural considerations for chromatin state models with transcription as a functional readout. *FEBS Letters*, 586(20), 3548-3554. doi:10.1016/j.febslet.2012.08.01
- Pinto, J. R., Gomes, A. V., Jones, M. A., Liang, J., Nguyen, S., Miller, T., Parvatiyar, M. S., & Potter, J. D. (2012). The functional properties of human slow skeletal troponin T isoforms in cardiac muscle regulation. *Journal of Biological Chemistry*, 287(44), 37362-37370. doi:10.1074/jbc.M112.364927
- Pinto, J. R., Yang, S. W., Hitz, Marc-P., Parvatiyar, M. S., Jones, M. A., Liang, J., Kokta, V., Talajic, M., Tremblay, N., Jaeggi, M., Andelfinger, G., & Potter, J. D. (2011). Fetal cardiac troponin isoforms rescue the increased Ca<sup>2+</sup> sensitivity produced by a novel double deletion in cardiac troponin T linked to restrictive cardiomyopathy: A clinical, genetic, and functional approach. *Journal of Biological Chemistry*, 286(23), 20901-20912. doi:10.1074/jbc.M111.234336

- Pinto, J. R., Siegfried, J. D., Parvatiyar, M. S., Li, D., Norton, N., Jones, M. A., Liang, J., Potter, J. D., & Hershberger, R. E. (2011). Functional characterization of TNNC1 rare variants identified in dilated cardiomyopathy. *Journal of Biological Chemistry*, 286(39), 34404-34412. doi:10.1074/jbc.M111.267211
- Pinto, J. R., Reynaldo, D. P., Parvatiyar, M. S., Dweck, D., Liang, J., Jones, M. A., Sorenson, M. M., & Potter, J. D. (2011). Strong cross-bridges potentiate the Ca<sup>2+</sup> affinity changes produced by hypertrophic cardiomyopathy cardiac troponin C mutants in myofilaments: A fast kinetic approach. *Journal of Biological Chemistry*, 286(2), 1005-1013. doi:10.1074/jbc.M110.168583
- Parvatiyar, M. S., Pinto, J. R., Dweck, D., & Potter, J. D. (2010). Cardiac troponin mutations and restrictive cardiomyopathy. *Journal of Biomedicine and Biotechnology*, 2010. doi:10.1155/2010/350706
- Willott, R. H., Gomes, A. V., Chang, A. N., Parvatiyar, M. S., Pinto, J. R., & Potter, J. D. (2010). Mutations in Troponin that cause HCM, DCM AND RCM: What can we learn about thin filament function? *Journal of Molecular and Cellular Cardiology*, 48(5), 882-892. doi:10.1016/j.yjmcc.2009.10.031
- Parvatiyar, M. S., Pinto, J. R., Liang, J., & Potter, J. D. (2010). Predicting cardiomyopathic phenotypes by altering Ca<sup>2+</sup> affinity of cardiac troponin C. *Journal of Biological Chemistry*, 285(36), 27785-27797. doi:10.1074/jbc.M110.112326
- Pinto, J. R., Parvatiyar, M. S., Jones, M. A., Liang, J., Ackerman, M. J., & Potter, J. D. (2009). A functional and structural study of troponin C mutations related to hypertrophic cardiomyopathy. *Journal of Biological Chemistry*, 284(28), 19090-19100. doi:10.1074/jbc.M109.007021
- Hershberger, R. E., Pinto, J. R., Parks, S. B., Kushner, J. D., Li, D., Ludwigsen, S., Cowan, J., Morales, A., Parvatiyar, M. S., & Potter, J. D. (2009). Clinical and functional characterization of TNNT2 mutations identified in patients with dilated cardiomyopathy. *Circulation: Cardiovascular Genetics*, 2(4), 306-313. doi:10.1161/CIRCGENETICS.108.846733
- Pinto, J. R., Parvatiyar, M. S., Jones, M. A., Liang, J., & Potter, J. D. (2008). A troponin T mutation that causes infantile restrictive cardiomyopathy increases Ca<sup>2+</sup> sensitivity of force development and impairs the inhibitory properties of troponin. *Journal of Biological Chemistry*, 283(4), 2156-2166. doi:10.1074/jbc.M707066200
- Landstrom, A. P., Parvatiyar, M. S., Pinto, J. R., Marquardt, M., Bos, J. M., Tester, D. J., Ommen, S. R., Potter, J. D., & Ackerman, M. J. (2008). Molecular and functional characterization of novel hypertrophic cardiomyopathy susceptibility mutations in TNNC1-encoded troponin C. *Journal of Molecular and Cellular Cardiology*, 45(2), 281-288. doi:10.1016/j.yjmcc.2008.05.003

- Chang, A. N., Parvatiyar, M. S., & Potter, J. D. (2008). Troponin and cardiomyopathy. *Biochemical and Biophysical Research Communications*, 369(1), 74-81. doi:10.1016/j.bbrc.2007.12.081
- Pritchard, T. J., Parvatiyar, M., Bullard, D. P., Lynch, R. M., Lorenz, J. N., & Paul, R. J. (2007). Transgenic mice expressing Na<sup>+</sup>-K<sup>+</sup>-ATPase in smooth muscle decreases blood pressure. *American Journal of Physiology - Heart and Circulatory Physiology*, 293(2). doi:10.1152/ajpheart.00279.2007
- Parvatiyar, K., Alsabbagh, E. M., Ochsner, U. A., Stegemeyer, M. A., Smulian, A. G., Hwang, S. H., Jackson, C. R., McDermott, T. R., & Hassett, D. J. (2005). Global analysis of cellular factors and responses involved in *Pseudomonas aeruginosa* resistance to arsenite. *Journal of Bacteriology*, 187(14), 4853-4864. doi:10.1128/JB.187.14.4853-4864.2005
- Shelly, D. A., He, S., Moseley, A., Weber, C., Stegemeyer, M., Lynch, R. M., Lingrel, J. B., & Paul, R. J. (2004). Na<sup>+</sup> pump alpha 2 - isoform specifically couples to contractility in vascular smooth muscle: Evidence from gene-targeted neonatal mice. *American Journal of Physiology - Cell Physiology*, 286(4 55-4), C813-20. doi:10.1152/ajpcell.00389.2003

### **Edited Monographs**

- Parvatiyar, M., & Goldberg-Smith, P. (Eds.). (2019). Trainee in the Spotlight, "Michelle Parvatiyar, Mentor in the Making [Monograph]. *Circulation Research*, 124, 475-476.

### **Presentations**

#### **Invited Presentations at Conferences**

- Parvatiyar, M. (accepted). *Evaluating Sarcospan as a Therapeutic Target for Cardiometabolic Disease*. Presentation to be given at The Heart Failure Conflux 2025, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Medical College, Campus Trivandrum, Kerala India, virtual. (International)
- Parvatiyar, M. (accepted). *Determining how tobacco use and obesity exacerbates a novel cardiovascular risk factor*. Presentation to be given at Florida Tobacco Research Symposium, Florida Department of Health, H. Lee Moffitt Cancer Center & Research Institute. (State)
- Parvatiyar, M. S. (accepted). *Extending the Cardiac Roles of Sarcospan*. Presentation to be given at International Society of Heart Research, International Society of Heart Research, Long Beach, CA. (International)

Parvatiyar, M. S. (presented 2024, August). *Post-translational modifications on beta-myosin heavy chain in the failing human heart*. Presentation at Florida Chapter of American College of Cardiology, American College of Cardiology, Orlando, FL. (State)

Parvatiyar, M. S., Singh, R., Brundage, E., Whitson, B., Janssen, P., Besiadecki, B., & Pinto, R. (presented 2019, February). *Beta-myosin heavy chain post-translational modifications in failing and non-failing human hearts*. Presentation at Biophysical Society Meeting, Biophysical Society, Baltimore, MD. (International)

Parvatiyar, M. S. (presented 2017, November). *Enhancing cell membrane stability and cell adhesion as a strategy to ameliorate cardiac disease*. Presentation at CDMD Muscle Biology and Disease Annual Scientific Retreat, UCLA Center for Duchenne Muscular Dystrophy, Los Angeles, CA. (Local)

Richardson, V., Parvatiyar, M. S., Marshall, J., Nguyen, R., Jordan, M., Roos, K., & Crosbie-Watson, R. (presented 2015, April). *The role of sarcospan in cardiac sarcolemma organization and function*. Presentation at Experimental Biology Meeting, American Physiological Society, Boston, MA. (International)

Parvatiyar, M. S. (presented 2014, November). *The role of sarcospan in the cardiac hypertrophic response (Invited Oral Presentation); UCLA Center for Duchenne Muscular Dystrophy Retreat*. Presentation at CDMD Muscle Biology and Disease Annual Scientific Retreat, UCLA Center for Duchenne Muscular Dystrophy, Los Angeles, CA. (Local)

### **Invited Presentations at Symposia**

Parvatiyar, M. (accepted). Evaluating Pathogenic Consequences of Hypertrophic Cardiomyopathy Mutants in Slow Skeletal Muscle. In Maicon Landim Vieira (Chair), *The Exhaustive Chase: Investigation of striated muscle regulation in health and disease" symposium*. Presentation to be conducted at the meeting of Florida State University, Tallahassee, FL. (National)

Denaud, R., Bolade, O., Valera, I., Rahimi Kahmini, A., Millan, J., Mohammadipour, N., & Parvatiyar, M. S. (presented 2024, June). Analyzing the Impacts of Genetic and Environmental Factors on Heart Sarcospan Levels. In *SSS Scholars Research Conference*. Presentation at the meeting of SAEOPP McNair, Atlanta, Georgia. (Regional)

Oko, C., Olateju, B., Samarah, L., Valera, I., Rahimi Kahmini, A., Millan, J., Mohammadipour, N., & Parvatiyar, M. S. (presented 2024, April). The effects of oxidative stress on sarcospan-deficient mice in the cardiovascular and respiratory system. In *UROP Poster Session*. Poster presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Olateju, B., Samarah, L., Valera, I., Rahimi Kahmini, A., Hwang, H., Oko, C., Millan, J.,

Mohammadipoor, N., & Parvatiyar, M. S. (presented 2024, March). Examining the impact of environmental factors that influence sarcospan expression in the heart. In *College of Education, Health, and Human Sciences Research Showcase*. Poster presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Mohammadipoor, N., Valera, I., Rahimi Kahmini R., Patel, S., Florence, J., Olateju, B., King, K., & Parvatiyar, M. S. (presented 2024, March). Investigating the novel role of sarcospan in modulating immune function in mice. In *College of Education, Health, and Human Sciences Research Showcase*. Poster presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Rahimi Kahmini, A., Parvatiyar, M. S., & Solis, C. (presented 2024, March). Sarcolemmal Protein Reorganization may Underlie Arrhythmia Susceptibility in Sarcospan-Deficient Mice. In *College of Education, Health, and Human Sciences Research Showcase*. Poster presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Olateju, B. S., & Parvatiyar, M. S. (presented 2023, March). Examining the Response of Young and Aged Sarcospan-Deficient Mice in Diet-Induced Obesity. In *College of Health and Human Sciences Research Showcase 2023*. Presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Rahimi Kahmini, A., & Parvatiyar, M. S. (presented 2023, March). Investigating the Sarcolemma-Sarcomere Connection in Dictating Force Transmission in the Heart. In *College of Health and Human Sciences Research Showcase*. Presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Reis, G., & Parvatiyar, M. S. (presented 2023, March). Sarcospan-Deficient Female Mice are Prone to Diet-Induced Autoimmunity. In *College of Health and Human Sciences Research Showcase*. Presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Cox, A., Missey, E., Mumbi, F., Parvatiyar, M. S., & Nagpal R. (presented 2021, September). Superimposing Celiac Gut Microbiome Metabolites on Healthy Caco-2 Cells to Observe Inflammatory Effects. In *President's Showcase of Undergraduate Excellence*. Poster presentation at the meeting of Florida State University, Tallahassee, FL. (Local)

Parvatiyar, M. A. S. (presented 2020, January). Connecting the Sarcolemma - to Cardiac Disease. In *AHA Research Reception*. Presentation at the meeting of American Heart Association, Tallahassee, FL. (Regional)

Parvatiyar, M. S., Brownstein, A., Collado, J., Gopal, J., Kanashiro Takeuchi, R., Dieseldorff Jones, K. M., Hammond, K., Pinto, J., & Crosbie\_Watson, R. (presented 2017, November). Sarcospan rescue of cardiac function in Duchenne muscular dystrophy models depends on recruitment of sarcolemma proteins. In Crosbie-Watson, RH (Chair), *CDMD Muscle Biology and Disease Annual Scientific Retreat*. Poster presentation at the

meeting of Center for Duchenne Muscular Dystrophy, UCLA, Los Angeles, CA. (Local)

Parvatiyar, M. S., Nguyen, R., Jordan, M., Roos, K., & Crosbie-Watson, R. (presented 2016, November). Sarcospan has a protective effect during the development of cardiac disease. In Baum, Linda (Chair), *CDMD Muscle Biology and Disease Annual Scientific Retreat*. Presentation at the meeting of Center for Duchenne Muscular Dystrophy, UCLA, Los Angeles, CA. (Local)

Parvatiyar, M. S., Nguyen, R., Gopal, J., Jordan, M., Brownstein, A., Roos, K., & Crosbie-Watson, R. (presented 2016, February). Sarcospan protects the myocardium during development of cardiac disease. In Spencer, M (Chair), *Muscle Biology and Disease Annual Scientific Retreat*. Presentation at the meeting of Center for Duchenne Muscular Dystrophy, Los Angeles. (Local)

Parvatiyar, M. S., Marshall, J., Jordan, M., Nguyen, R., Roos, K., Martinez, L., Spencer, M., & Crosbie-Watson, R. (presented 2013, October). Loss of sarcospan has a deleterious effect on cardiac function in aged mice. In Pyle, April (Chair), *CDMD Muscle Biology and Disease Annual Scientific Retreat*. Presentation at the meeting of Center for Duchenne Muscular Dystrophy, UCLA, Los Angeles, CA. (Local)

Parvatiyar, M. S., Pinto, J., Jones, M., & Potter, J. (presented 2008, May). Functional characterization of cardiac troponin C mutations linked to HCM. In *Graduate Student Forum*. Poster presentation at the meeting of University of Miami School of Medicine, Miami, FL. (Local)

### **Refereed Presentations at Conferences**

Parvatiyar, M. (presented 2026, February). *The Hypertrophic Cardiomyopathy-Linked Tnnc1 A8V Mutant Lowers Tetanic Force Generation in Soleus Muscle*. Presentation at Biophysical Society Meeting, Biophysical Society, San Francisco, CA. (International)

Mohammadipour, N., Windisch, T., Carrel, W., Rahimi Kahmini, A., & Parvatiyar, M. S. (presented 2025, May). *The sarcospan-deficient myocardium exhibits a heightened inflammatory response to beta-adrenergic stimulation*. Poster presentation at International Society of Heart Research Conference, The sarcospan-deficient myocardium exhibits a heightened inflammatory response to beta-adrenergic stimulation, Nara, Japan. (International)

Olateju, B. S., Sulph, T., Windisch, T., Millan, J., Denaud, R., Rahimi Kahmini, A., Mohammadipour, N., & Parvatiyar, M. S. (presented 2025, April). *Evaluation of Sarcospan as a Genetic Factor Contributing to Cardiometabolic Risk in Smokers*. Presentation at APS Summit, American Physiological Society, Baltimore, MD. (International) Retrieved from <https://doi.org/10.1152/physiol.2025.40.S1.1774>

- Mohammdipour, N., Olateju, B., Rahimi Kahmini, A., & Parvatiyar, M. S. (presented 2025, April). *Investigating the heightened pro-fibrotic response of sarcospan-deficient hearts to isoproterenol treatment*. Poster presentation at APS Summit, American Physiological Society, Baltimore, MD. (International) Retrieved from <https://doi.org/10.1152/physiol.2025.40.S1.1796>
- Rahimi Kahmini, A., Crawford, R., Mohammadipour, N., Salinas, T., Landim Vieira, M., Pinto, J. R., Solis, C., & Parvatiyar, M. S. (presented 2025, February). *Increased Force Production in Sarcospan-Deficient Mouse Hearts May Contribute to Age-Related Ventricular Remodeling*. Poster presentation at Biophysical Society Meeting, Biophysical Society, Los Angeles, CA. (International) Retrieved from Biophys J 124(3) Suppl p622a
- Olateju, B., Samarah, L., Valera, I., Rahimi Kahmini, R., Hwang, H., Oko, C., Millan, J., Mohammadipour, N., Salazar, G., & Parvatiyar, M. S. (presented 2024, April). *Examining the impact of environmental factors that influence sarcospan expression in the heart*. Poster presentation at APS Summit, American Physiological Society, Long Beach, CA. (International)
- Mohammadipour, N., Valera, I., Rahimi Kahmini R., Patel, S., Florence, J., Olateju, B., King, K., & Parvatiyar, M. S. (presented 2024, April). *Investigating the novel role of sarcospan in modulating immune function in mice*. Poster presentation at APS Summit, American Physiological Society, Lon. (International)
- Rahimi Kahmini, A., Parvatiyar, M., & Solis, C. (presented 2024, February). *Sarcolemmal protein reorganization may underlie arrhythmia susceptibility in sarcospan-deficient mice*. Poster presentation at Biophysical Society Meeting, Biophysical Society, Philadelphia, PA. (International)
- Hwang, H. S., Centner, A., Ukhanov, V., Cejas Carbonell, A., Valera, I., Parvatiyar, M. S., & Salazar, G. (presented 2023, November). *Role of p62/SQSTM1 on Acute Ischemia-Induced Arrhythmias after Chronic Smoke in Mice*. Poster presentation at AHA General Meeting, American Heart Association, Philadelphia, PA. (International)
- Samarah, L., Valera, I., Reis, G., Rahimi Kahmini, A., Olateju, B., Mohammadipour, N., & Parvatiyar, M. S. (presented 2023, July). *Sex-Related Differences in Immune Responsiveness of Sarcospan-Deficient Mice to Metabolic Stress*. Poster presentation at AHA- Basic Cardiovascular Sciences, American Heart Association, Boston, MA. (International)
- Olateju, B., Rahimi Kahmini, A., Valera, I., Reis, G., Samarah, L., Mumbi, F., Mohammadipour, N., & Parvatiyar, M. S. (presented 2023, April). *Assessment of the Response of Young and Aged Sarcospan-Deficient Mice to Nutrient Excess*. Poster presentation at American Physiological Society Summit, American Physiological Society, Long Beach, CA. (International)

- Patel, S., Florence, J., da Santos, G., Coscarella, I., Garcia, M., Chase, P. B., Laitano, O., Pinto, J., & Parvatiyar, M. S. (presented 2023, March). *Understanding the Impact of Cardiomyopathy Variants in the TNNC1 Gene on Skeletal Muscle Function*. Poster presentation at Advances in Muscle Biology Conference, University of Florida, Gainesville, FL. (International)
- Rahimi Kahmini, A., Valera, I., Carbonell, A., Prascak, J., Mumbi, F., Parvatiyar, M. S., & Hwang, H. (presented 2023, February). *Compensatory calcium handling may underlie increased arrhythmia susceptibility of sarcospan-deficient mice after ischemia-reperfusion injury*. Poster presentation at Biophysical Society Meeting, The Biophysical Society, San Diego, CA. (International) Retrieved from 10.1016/j.bpj.2022.11.2091
- Mumbi, F., Landim-Vieira, M., Olateju, B., Coscarella, I., Chase, P., Pinto, J., & Parvatiyar, M. S. (presented 2023, February). *Investigating the Sarcolemma-Sarcomere Connection in Dictating Force Transmission in the Heart*. Poster presentation at Biophysical Society Meeting, Biophysical Society, San Diego, CA. (International) Retrieved from late breaking abstract
- Crawford, R., Valera, I., Pindado, J., Reis, G., Rahimi Kahmini, R., Mumbi, F., Parvatiyar, K., & Parvatiyar, M. S. (presented 2022, April). *Sarcospan-deficient mice exhibit a heightened inflammatory phenotype under obesiogenic conditions*. Poster presentation at Experimental Biology, American Physiological Society, Philadelphia, PA. (International) Retrieved from <https://doi.org/10.1096/fasebj.2022.36.S1.R6079>
- Matthews, A., Valera, I., Crawford, R., Elsheikh, S., Hwang HS, & Parvatiyar, M. S. (presented 2021, April). *Establishing a Role for Sarcospan as an Obesity-Susceptibility Gene in Mice*. Poster presentation at Experimental Biology Meeting, American Physiological Society, virtual due to Covid-19. (International)
- Salazar, G., Parvatiyar, M. S., Valera, I., Cullen, A., & Hwang, H. (presented 2021, April). *Reduction of P62/SQSTM1 on Calcium Handling in Stressed Myocytes*. Poster presentation at Experimental Biology Meeting, American Physiological Society, virtual due to Covid-19. (International)
- Landim-Vieira, M., Childers, M., Wacker, A., Rodriguez Garcia, M., Singh, R., Brundage, E., Whitson, B., Janssen, P., Chase, P., Besiadecki, B., Regnier, M., Pinto, J., & Parvatiyar, M. S. (presented 2021, February). *Post-Translational Modifications in Human Beta-Myosin Heavy Chain*. Poster presentation at Biophysical Society Meeting, Biophysical Society, virtual due to Covid-19. (International)
- Hwang, H., Pindado, J., Koh, Y., Parvatiyar, M. S., & Salazar, G. (presented 2020, April). *Protective Role of P62 Protein on Acute Ischemia-Induced Arrhythmia Susceptibility*. Poster presentation at Experimental Biology Meeting, American Physiological Society, San Diego, CA (cancelled due to Covid). (International)

- Wacker, A., Elsheikh, S., Valera, I., Hwang, H., & Parvatiyar, M. S. (presented 2020, April). *Understanding Sarcospan Protein Function by Exposure of Mice to Beta-Adrenergic Stress Conditions*. Poster presentation at Experimental Biology Meeting, American Physiological Society, San Diego, CA (cancelled due to Covid). (International)
- Coscarella, I., Vieira, M., Valera, I., Wacker, A., Chase, P., Pinto, J., & Parvatiyar, M. S. (presented 2020, February). *Connecting cardiac sarcolemma protein content with sarcomeric function*. Poster presentation at Biophysical Society Meeting, Biophysical Society, San Diego, CA. (International)
- Wacker, A., Rodriguez Garcia, M., Vieira, M., Singh, R., Brundage, E., Whitson, B., Janssen, P., Chase, P., Biesiadecki, B., Pinto, J., & Parvatiyar, M. S. (presented 2020, February). *Reduced beta myosin heavy chain K213 Acetylation and T215 phosphorylation in human heart failure*. Poster presentation at Biophysical Society Meeting, Biophysical Society, San Diego, CA. (International)
- Dieseldorff Jones, K., Vied, C., Valera, I., Chase, P., Parvatiyar, M. S., & Pinto, J. (presented 2020, February). *Sex differences in regulating the cardiac transcriptome within a murine model for hypertrophic cardiomyopathy*. Poster presentation at Biophysical Society Meeting, Biophysical Society, San Diego, CA. (International)
- Tadros, H., Life, C., Garcia, G., Jones, E., Gong, D., Parvatiyar, M. S., Allen, H., Kim, J., Yan, N., Pinto, J., & Landstrom, A. (presented 2018, November). *Amino acid-level signal-to-noise analysis of rare variants in the troponin complex identifies "hot spots" associated with early heart failure, increased mortality, and sudden death*. Poster presentation at American Heart Association Meeting - General Sessions, American Heart Association, Chicago, IL. (International)
- Parvatiyar, M. S., Kanashiro Takeuchi, R., Dieseldorff Jones, K., Brownstein, A., Collado, J., Gopal, J., Hammond, K., Pinto, J., & Crosbie-Watson, R. (presented 2018, June). *Sarcospan rescues cardiac function in Duchenne muscular dystrophy mouse models in the absence of abundant utrophin upregulation*. Poster presentation at New Directions in Biology and Disease of Skeletal Muscle Conference, Wellstone Foundation, New Orleans, LA. (International)
- Parvatiyar, M. S., Nguyen, R., Jordan, M., Roos, K., & Crosbie-Watson, R. (presented 2016, July). *Sarcospan has a protective effect during the development of cardiac disease*. Poster presentation at Basic Cardiovascular Sciences Meeting, American Heart Association, Phoenix, AZ. (International)
- Parvatiyar, M. S., Nguyen, R., Gopal, J., Jordan, M., Marshall, J., Roos, K., & Crosbie-Watson, R. (presented 2016, June). *Transgenic and AAV introduction of sarcospan stabilizes the cell membrane in the DMD heart*. Poster presentation at New Directions in Biology and Disease of Skeletal Muscle Conference, University of Florida, Orlando, FL. (National)

- Parvatiyar, M. S., Marshall, J., Nguyen, R., Jordan, M., Richardson, V., Roos, K., & Crosbie-Watson, R. (presented 2014, July). *The role of sarcospan in cardiac sarcolemma organization and function*. Poster presentation at Basic Cardiovascular Sciences Meeting, American Heart Association, Las Vegas, NV. (International)
- Parvatiyar, M. S., Marshall, J., Jordan, M., Nguyen, R., Richardson, V., Roos, K., & Crosbie-Watson, R. (presented 2014, June). *Beta adrenergic stimulation reveals a role for sarcospan in cardiac hypertrophy*. Poster presentation at New Directions in Biology and Disease of Skeletal Muscle Conference, University of Florida, Chicago, IL. (International)
- Parvatiyar, M. S., Lopez, T., Franklin, S., & Vondriska, T. (presented 2013, July). *Distinctive roles of linker histone variants in the hypertrophic response of cardiomyocytes*. Poster presentation at Basic Cardiovascular Sciences Meeting, American Heart Association, Las Vegas, NV. (International)
- Parvatiyar, M. S., Franklin, S., Chen, H., Wang, Y., & Vondriska, T. (presented 2012, April). *Cardiac linker histones are differentially regulated following hypertrophic stimuli*. Poster presentation at Experimental Biology Meeting, American Physiological Society, San Diego, CA. (International)
- Parvatiyar, M., Liang, J., Jones, M., Potter, J., & Pinto, J. (presented 2012, February). *Pseudo-phosphorylation of cardiac troponin I containing the RCM troponin T deletion glutamic acid 96 is not an accurate indicator of the phosphorylation effects by PKA in skinned fibers*. Poster presentation at Biophysical Society Meeting, Biophysical Society, San Diego, CA. (International)
- Parvatiyar, M. S., Yang, S., Pinto, J., Jones, M., Liang, J., Andelfinger, A., & Potter, J. (presented 2010, February). *Functional consequences of a novel cardiac troponin T mutation linked to infantile restrictive cardiomyopathy*. Poster presentation at Biophysical Society Meeting, Biophysical Society, San Francisco, CA. (International)
- Dweck, D., Pinto, J., Reynaldo, D., Parvatiyar, M. S., Jones, M., Sorenson, M., & Potter, J. (presented 2010, February). *Strong crossbridges are required to recapitulate the Ca<sup>2+</sup> affinity changes produced by HCM-cTnC mutants in skinned fibers*. Poster presentation at Biophysical Society Meeting, Biophysical Society, San Francisco, CA. (International)
- Parvatiyar, M. S., Pinto, J., Liang, J., Jones, M., & Potter, J. (presented 2009, February). *Troponin T deletion 96 related to restrictive cardiomyopathy ablates the effects of cardiac troponin I PKA pseudo-phosphorylation on Ca<sup>2+</sup> sensitivity of force development*. Poster presentation at Biophysical Society Meeting, Biophysical Society, Boston, MA. (International)
- Parvatiyar, M. S., Pinto, J., Jones, M., & Potter, J. (presented 2008, February). *Functional effects of newly discovered cardiac troponin C HCM mutations*. Poster presentation at

Biophysical Society Meeting, Biophysical Society, Long Beach, CA. (International)

Landstrom, A., Parvatiyar, M. S., Pinto, J., Marquardt, M., Bos, J., Ommen, S., Potter, J., & Ackerman, M. (presented 2007, November). *Molecular and functional characterization of novel hypertrophic cardiomyopathy susceptibility mutations in TNNC1-encoded troponin C*. Poster presentation at American Heart Association Meeting - General Sessions, American Heart Association, Orlando, FL. (International)

Parvatiyar, M. S., Jones, M., Pinto, J., Liang, J., & Potter, J. (presented 2007, February). *The glutamine 96 deletion in human cardiac troponin T associated with infantile restrictive cardiomyopathy increases the Ca<sup>2+</sup> sensitivity of force in skinned muscle fibers*. Poster presentation at Biophysical Society Meeting, Biophysical Society, Baltimore, MD. (International)

Parvatiyar, M. S., Liang, J., & Potter, J. (presented 2006, February). *Effects of troponin C mutants with altered calcium affinities on Ca<sup>2+</sup> sensitivity of force development*. Poster presentation at Biophysical Society Meeting, Biophysical Society, Salt Lake City, UT. (International)

Staton, T., Stegemeyer, M. A., Parvatiyar, K., Paul, R., & Strauch, A. (presented 2004, April). *Overexpression of alpha 1 and alpha 2-isoform specific Na<sup>+</sup> -K<sup>+</sup> -ATPase in mouse smooth muscle*. Poster presentation at Experimental Biology Meeting, American Physiological Society, Washington, DC. (International)

Weber, C., Shelly, D., Stegemeyer, M. A., Lingrel, J., Nullmeyer, K., Lynch, R., & Paul, R. (presented 2003, February). *Coupling of the Na<sup>+</sup>, K<sup>+</sup>-ATPase alpha 2-isoform to excitation-contraction coupling in vascular smooth muscle*. Poster presentation at Experimental Biology Meeting, American Physiological Society, San Diego, CA. (International)

### **Invited Lectures and Readings of Original Work**

Parvatiyar, M. (2024, October). *Understanding the Roles of Sarcospan in Cardiovascular Disease*. Delivered at University of South Florida Heart Institute, Tampa, FL. (State)

Parvatiyar, M. S. (2022, November). *Alterations in Post-translational modification patterns on  $\beta$ -myosin heavy chain in ischemic and non-ischemic human hearts*. Delivered at The Ohio State University, Department of Physiology and Cell Biology, Columbus, OH. (National)

Parvatiyar, M. S. (2022, October). *Obesity Susceptibility and Sarcospan*. Delivered at Ohio University, Ohio University, Heritage College of Osteopathic Medicine, Athens, OH. (National)

Parvatiyar, M. S. (2022, June). *Post-translational modification patterns on  $\beta$ -myosin heavy chain*

*are altered in ischemic and non-ischemic human hearts.* Delivered at International Sarcomere Society, University of Washington, Seattle, WA, Center for Translational Muscle Research. (International)

Parvatiyar, M. S. (2019, November). *Remodeling the Cardiac Sarcolemma to Improve Disease Outcomes.* Delivered at FAMU-Florida State University, Tallahassee, FL. (Local)

Parvatiyar, M. S. (2019, March). *Understanding how sarcolemmal remodeling influences disease.* Delivered at Florida State University, Tallahassee, FL. (Local)

Parvatiyar, M. S. (2018, December). *Recruitment of sarcolemma proteins by sarcospan rescues Duchenne muscular dystrophy associated cardiomyopathy.* Delivered at The Florida State University, Institute of Molecular Biology, Tallahassee, FL. (Local)

Parvatiyar, M. S. (2017, August). *Exploring membrane stabilization and cellular adhesion as a strategy to ameliorate cardiac disease.* Delivered at University of Cincinnati, Department of Internal Medicine, Cincinnati, OH. (National)

Parvatiyar, M. S. (2016, December). *Targeting membrane stabilization and cell adhesion in cardiac disease. Invited Speaker.* Delivered at University of Heidelberg, Department of Molecular Cardiology, Heidelberg, Germany. (International)

Parvatiyar, M. S. (2016, September). *Exploring membrane stabilization and cell adhesion as a strategy to ameliorate cardiac disease.* Delivered at Florida State University, Tallahassee, FL. (National)

## **Contracts and Grants**

### **Contracts and Grants Funded**

Parvatiyar, M.S. (PI), & Gordon, B (co-I). (May 2024–May 2025). *Investigating a non-canonical NF- $\kappa$ B signaling module in DMD-associated disease pathology.* Funded by FSU SEED Program. Total award \$100,000.

Parvatiyar, M.S. (PI), & Gordon, B (co-I). (May 2024–Dec 2025). *Targeting Novel Inflammatory Pathways in Duchenne Muscular Dystrophy.* Funded by FSU Institute of Pediatric Rare Diseases. Total award \$37,500.

Parvatiyar, M.S. (PI). (May 2024–May 2025). *Uncovering a novel mediator of autoimmunity.* Funded by Dean's Catalyst Award Seed Grant. Total award \$10,000.

Parvatiyar, M.S. (PI), & Gordon, B (co-PI). (May 2023–Sep 2024). *Generating A Novel Mouse To Test The Role Of Sarcospan In The Development Of Skeletal Muscle Weakness With Advancing Age.* Funded by Institute of Successful Longevity/Florida State University.

Total award \$25,000.

Parvatiyar, M.S. (PI). (Aug 2022–Jul 2023). *McKnight Junior Faculty Development Fellowship Program*. Funded by Florida Education Fund, Inc. (None). Total award \$15,000.

Parvatiyar, M.S. (PI), & Holmes, C.A. (Co-I). (Jun 2021–Apr 2023). *PG:Development of a Novel Therapeutic Strategy to Reduce Cardiac Injury after Myocardial Infarction*. Funded by FSU CRC. (None). Total award \$25,000.

Parvatiyar, M.S. (PI), Salazar, GA (co-I), Hwang, HS (co-I), & Bamber, M (co-I). (May 2021–Dec 2024). *Determining how tobacco use and obesity exacerbates a novel cardiovascular risk factor*. Funded by James and Esther King Biomedical Research Program. (21K12). Total award \$535,396.

Parvatiyar, M.S. (PI), Salazar Aranda, G.A. (co-I), & Hwang, H.S. (co-I). (May 2020–Aug 2020). *CCSFF Covid:Understanding Genetic and Pharmaceutical Risk Factors Increasing Risk of SARS-CoV-2 Infection*. Funded by FSU. (None). Total award \$20,000.

Steiner, J. (PI), Fadool, D.A. (co-I), Lee, C. (co-I), Spector, A.C. (co-I), Williams, D.L. (co-I), Delp, M.D. (co-I), Hammock, E.A.D. (co-I), Delp, J.M. (co-I), Gordon, B.S. (co-I), Singh, P. (co-I), Hennigar, S.R. (co-I), Parvatiyar, M.S. (co-I), La Favor, J.D. (co-I), & Storace, D.A. (co-I). (Jan 2020–Apr 2020). *EIEG:Purchase of EchoMRI to Assess Body Composition in Mice, Rats and Tissue Specimens*. Funded by FSU CRC. (None). Total award \$70,000.

Parvatiyar, M.S. (PI). (May 2019–Aug 2019). *Exploring Sex-Dependent Factors Governing a Novel Driver of Obesity*. Funded by FSU CRC. Total award \$20,000.

Parvatiyar, M.S. (PI). (May 2019–Aug 2019). *FYAP:Exploring Sex-dependent Factors Governing a Novel Driver of Obesity*. Funded by FSU CRC. (None). Total award \$20,000.

Parvatiyar, M.S. (PI). (Aug 2018–Aug 2022). *Startup - M. Parvatiyar*. Funded by FSU. (None). Total award \$321,373.

Parvatiyar, M.S. (PI). (Jul 2018–Jun 2021). *Exploring Muscle Cell Adhesion as a Therapeutic Strategy in the Heart*. Funded by American Heart Association. Total award \$231,000.

Parvatiyar, M.S. (co-I), & Crosbie-Watson, RH (PI). (Aug 2016–Jul 2020). *Restoration of muscle adhesion to treat cardiomyopathy in muscular dystrophy*. Funded by NIH. (1R01HL126204-01A1). Total award \$1,540,000.

Parvatiyar, M.S. (co-I), & Crosbie-Watson, R.H. (PI). (Jul 2016–Jun 2019). *Improving cell adhesion to protect the dystrophic cardiac sarcolemma*. Funded by Muscular Dystrophy Association. (MDA 41634). Total award \$300,000.

Parvatiyar, M.S. (PI). (Jun 2014–Dec 2004). *Exploring the therapeutic potential of sarcospan in dystrophin cardiomyopathies*. Funded by CureDuchenne. Total award \$25,000.

Parvatiyar, M.S. (co-I), & Crosbie-Watson, RH (PI). (Aug 2013–Jul 2014). *Investigation of cardiomyopathy in sarcospan deficiency*. Funded by UCLA - CTSI Core Facilities Grant. (UL1TR000124). Total award \$50,000.

Parvatiyar, M.S. (PI), & Vondriska, T. M. (Aug 2011–Jul 2013). *Role of linker histone variants in cardiac phenotype in health and disease*. Funded by NIH. (1F32HL110632-01). Total award \$145,194.

Parvatiyar, M.S. (PI). (Jul 2009–Oct 2010). *Characterization of cTnC mutations related to HCM, RCM and DCM in knock-in mice*. Funded by American Heart Association. (09POST2300030). Total award \$83,972.

Parvatiyar, M.S. (trainee). (Jul 2007–Jun 2009). *University of Miami -Training Program in Cardiovascular Signaling*. Funded by NIH T32. (2 T32 HL007 188 31A1). Total award \$52,000.

Parvatiyar, M.S. (PI). (Jul 2005–Jun 2007). *Assessment of calcium sensitivity of force development of cardiac troponin C mutants with altered calcium sensitivities*. Funded by American Heart Association. (0515211B). Total award \$42,000.

## **Service**

### **Florida State University**

#### **FSU University Service**

Faculty Volunteer, University Grievance Committee (2022–present).

Faculty Committee Member, Academic Honor Policy Hearing (2021–present).

#### **FSU College Service**

Member, CORE Committee (2025–present).

Member, Promotion and Tenure Committee (2025–present).

Member, CHHS Honors and Awards Committee (2023–present).

Long Presentation Judge, CHHS Research Showcase (2022–present).

Lab Tours, College of Human Sciences - Annual Graduate Programs Open House (2019).

Lab Tours, College of Human Sciences Annual Graduate Programs Open House (2018).

### **FSU Department Service**

Member, Graduate Committee (2025–present).

Committee member, Departmental Executive Committee (2024–present).

Committee member, Search Committee - Exercise Physiology Tenure Track Faculty Position (2022–present).

Committee member, Search Committee - Exercise Physiology Tenure Track Faculty Position (2021–2022).

Committee member, Search Committee - Neurophysiologist Tenure Track Faculty Position (2022).

Committee member, Search Committee - Exercise Physiology Tenure Track Faculty Position (2020–2021).

Committee member, Search Committee - Exercise Physiology Tenure Track Faculty Position (2019–2020).

Committee member, Search Committee - Exercise Physiology Tenure Track Faculty Position (2018–2019).

## **The Profession**

### **Editor for Refereed Journals**

Topic Editor, *Frontiers in Physiology* (2021).

Review Editor, *Frontiers in Physiology* (2020).

### **Guest Editing for Refereed Journals**

Hucke, F., & Bugert, J. (Eds.). (2020, December). Current and Promising Antivirals Against Chikungunya Virus [Special Issue]. *Frontiers in Immunology*.

### **Editorial Board Membership(s)**

*Biomolecules* - Topic Editor (2021–present).

*Frontiers in Physiology* - Review Editor - *Striated Muscle Physiology* (2019–present).

### **Guest Reviewer for Refereed Journals**

*International Journal of Molecular Sciences* (Jan–Feb 2024).

*The Journal of Cardiovascular Aging* (Sep–Dec 2023).

*Frontiers in Physiology* (Jan–Feb 2023).

*Frontiers in Neuroinformatics* (Jun–Aug 2022).

*Frontiers in Physiology* (Jun–Aug 2022).

*Electrophoresis* (Jun 2022).

*The Journal of Cardiovascular Aging* (Apr 2022).

*Frontiers in Bioscience-Landmark* (Sep–Nov 2021).

*Frontiers in Cardiovascular Science* (Aug–Oct 2021).

*International Journal of Molecular Sciences* (Aug–Sep 2021).

*Physiological Reports* (Jul 2021).

*International Journal of Molecular Sciences* (May–Jun 2021).

*American Journal of Physiology* (Apr–Jun 2021).

*International Journal of Molecular Sciences* (Mar–May 2021).

*International Journal of Molecular Sciences* (Mar–Apr 2021).

*Healthcare* (Jan–Feb 2021).

*Cancers* (Dec 2020–Jan 2021).

*American Journal of Physiology - Heart and Circulatory Physiology* (Sep–Dec 2020).

*Circulation: Cardiovascular Genetics* (Sep–Oct 2020).

*Healthcare* (Jan 2020).

*Molecular Metabolism* (Sep–Nov 2019).

*Oxidative Medicine and Cellular Longevity* (Sep–Nov 2019).

*Circulation Research* (Sep 2019).

*Circulation: Heart Failure* (Nov 2018–Jan 2019).

*PLoS One* (Jun–Jul 2018).

*American Journal of Physiology - Heart and Circulatory Physiology* (Oct–Feb 2018).

*AJP Report* (Jan–Apr 2017).

*Comprehensive Physiology* (Oct–Dec 2016).

*PLoS One* (Jun–Oct 2016).

*Molecular Nutritional Food Research* (May–Sep 2016).

*Journal of Molecular and Cellular Cardiology* (Jul–Aug 2016).

*Frontiers in Physiology* (Jun–Aug 2016).

*Comparative Biochemistry and Physiology* (May–Jul 2016).

*Journal of Physical Chemistry* (Mar–May 2016).

### **Chair of a Symposium**

Parvatiyar, M. (Chair). (2026, February). *Muscles, Mechanics, Structure and Regulation Platform*. Symposium conducted at the meeting of Biophysical Society Meeting, San Francisco, CA.

Baker, J., & Parvatiyar, M. (Chair). (2025, September). *Regulation of Cardiac Sarcomeres in Heart Failure (Platform)*. Symposium conducted at the meeting of Annual Conference International Academy of Cardiovascular Sciences (NAS), Las Vegas, Nevada.

Parvatiyar, M. S., & Granzier, H. (Chair). (2024, May). *Thin filament associated proteins*. Symposium conducted at the meeting of Myofilament Meeting, Madison, WI.

Parvatiyar, M. S., & Colson, B. (Chair). (2024, February). *Cardiac Muscle Society Meeting and Reception - Early Career Event and Host of Early Career Investigator Short Talk Competition*. Symposium conducted at the meeting of Cardiac Muscle Society, Philadelphia, PA.

Parvatiyar, M. S., & Toth, M. (Chair). (2023, March). *Cytoskeleton, Sarcomere Structure-Function, and Calcium Handling*. Symposium conducted at the meeting of Advances in Muscle Biology Conference, University of Florida, Gainesville, FL.

Parvatiyar, M. S., & Colson, B. (Chair). (2023, February). *Cardiac Muscle Society Reception - Early Career Event*. Symposium conducted at the meeting of Cardiac Muscle Society, San Diego, CA.

Parvatiyar, M. S., & Colson, B. (Chair). (2022, February). *Cardiac Muscle Society Reception - Early Career Committee Event*. Symposium conducted at the meeting of Cardiac Muscle Society, 2022.

Parvatiyar, M., Kirk, J., Barefield, D., Borzok, M., Caporizzo, M., Chung, C., Colson, B., Dey, S., Gururaja Rao, S., Johnson, C., Mishra, S., Papadaki, M., Previs, M., & Toepfer, C. (Chair). (2021, February). *Early Career Committee Event*. Symposium conducted at the meeting of Cardiac Muscle Society, virtual.

Parvatiyar, M., & Sadayappan, S. (Chair). (2020, April). *Experimental Biology: Platform: "Organoids in a Dish."* Symposium conducted at the meeting of American Physiological

Society, virtual.

Parvatiyar, M., Kirk, J., Barefield, D., Borzok, M., Caporizzo, M., Chung, C., Colson, B., Dey, S., Gururaja Rao, S., Johnson, C., Mishra, S., Papadaki, M., & Previs, M. (Chair). (2020, February). *Early Career Committee Event*. Symposium conducted at the meeting of Cardiac Muscle Society, San Diego, CA.

Parvatiyar, M., & Wang, X. (Chair). (2019, July). *Basic Cardiovascular Sciences Scientific Sessions: Platform "Beyond Myocytes and Fibroblasts: Forgotten Cells of the Heart"*. Symposium conducted at the meeting of American Heart Association, Boston, MA.

Parvatiyar, M. (Chair). (2016, November). *Muscle Cell Biology and Disease Annual Scientific Retreat*. Symposium conducted at the meeting of Center for Duchenne Muscular Dystrophy, Los Angeles, CA.

Parvatiyar, M., & Sadayappan, S. (Chair). (2016, November). *General Scientific Sessions, Platform: "Cellular and Molecular Aspects of Cardiac Hypertrophy"*. Symposium conducted at the meeting of American Heart Association, New Orleans, LA.

Parvatiyar, M., & Weisleder, N. (Chair). (2015, April). *Experimental Biology - Platform "Cellular Membrane Repair in Cardiovascular Physiology and Pathophysiology"*. Symposium conducted at the meeting of American Physiological Society, Boston, MA.

### **Reviewer or Panelist for Grant Applications**

American Heart Association (2024).

American Heart Association Study Section (2024).

Duchenne Parent Project - Italian Association on Duchenne and Becker muscular dystrophy (2024).

FSU Mock American Heart Association Review Panel (2023).

NIH NHBLI (2023).

American Heart Association (2023).

American Heart Association (2022).

FSU Mock American Heart Association Review Panel (2022).

American Heart Association (2022).

## **Service to Professional Associations**

Panelist/Judge, Louis N. and Arnold M. Katz Basic Science Research Prize for Early Career Investigators, AHA Scientific Sessions, American Heart Association (2025–present).

Awards Committee Member, Society of South Asian Heart Research (2025–present).

Treasurer, Cardiac Muscle Society (2025–present).

Contributor - AJP Antibody Guidelines Group - AJP Renal Physiology, Providing guidelines for best practices for antibody use in immunofluorescence, American Physiological Society (2022–present).

Chair, Early Career Committee, Cardiac Muscle Society (2018–present).

Awards Committee Member, BCVS Katz Award of the Council on Basic Cardiovascular Sciences, American Heart Association (2025–2027).

Event Organizing Committee, Cardiac Muscle Society Annual Meeting and Reception, Cardiac Muscle Society (2025–2026).

Poster Judge, Judged two poster sessions (graduate and postdoc), Myofilament Meeting - University of Wisconsin-Madison (2024).

Group Discussion Leader, Led small group discussion "Intrinsically Disordered Proteins" with Kerry McDonald (Univ. of Missouri), Myofilament Meeting - University of Wisconsin-Madison (2024).

Moderator, Cardiac Muscle Society - Early Career Committee virtual seminar, Cardiac Muscle Society (2023).

Poster Judge, Advances in Muscle Biology Conference, University of Florida (2023).

Moderator, Cardiac Muscle Society - Early Career Committee Virtual Seminar Series, Cardiac Muscle Society (2022).

Moderator, Cardiac Muscle Society - Early Career Committee Virtual Seminar Series, Cardiac Muscle Society (2021).

Moderator/Host, Muscle Cell Biology and Disease Annual Scientific Retreat, Center of Duchenne Muscular Dystrophy (2016).

## **Interviews**

- Anna Prentiss. (2023, March). FSU professors receive fellowship that encourages underrepresented junior faculty. *Florida State University News*. Retrieved from <https://news.fsu.edu/news/education-society/2023/03/29/fsu-professors-receive-fellowship-that-encourages-underrepresented-junior-faculty/>
- Duke, J. (2022, June). Following the beat: FSU researchers make headway into function of the heart. *Florida State University News* [website]. Retrieved from <https://news.fsu.edu/news/health-medicine/2022/06/28/following-the-beat-fsu-researchers-make-headway-into-function-of-the-heart/>
- Duke, J. (2021, September). FSU researcher receives Florida Department of Health grant to study cardiovascular health. *Florida State University News* [website]. Retrieved from <https://news.fsu.edu/news/health-medicine/2021/09/09/fsu-researcher-receives-florida-department-of-health-grant-to-study-cardiovascular-health/>
- Boehm, Z. (2019, June). Researchers' discovery could lead to improved therapies for Duchenne muscular dystrophy. *Florida State University News* [website]. Retrieved from <https://news.fsu.edu/news/health-medicine/2019/06/14/researchers-discovery-could-lead-to-improved-therapies-for-duchenne-muscular-dystrophy/>
- Podcast Author Interview, Santos, R (Author), Parvatiyar, MS (Content expert), Diz, D (Associate Editor), & Hansell Keehan, K (Executive Editor). (2019, January). Mas-related G-protein receptor member D deficiency leads to severe dilated cardiomyopathy in mice. *American Journal of Physiology - Heart & Circulatory Physiology* [Podcast].
- Pam Goldberg-Smith. (2019). Michelle Parvatiyar - Mentor in the Making. *Circulation Research* [journal]. Retrieved from <https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.119.314764>

### **Service to Other Universities**

- Grant Reviewer - Clinical Grants, *University of Wisconsin - Herma Heart Institute at Children's Wisconsin* (2023).

### **The Community**

- Jump Judge, Cross country event, Judging and technical evaluation of equestrian sports, Red Hills International Horse Trials (2022).
- Jump Judge, Cross Country Event, Judging and technical evaluation of equestrian sports, Red Hills International Horse Trials (2020).

Jump Judge, Cross Country Event, Judging and technical evaluation of equestrian sports, Red Hills International Horse Trials (2019).